National Institute of Environmental Health Sciences

Assessment of awareness regarding climate change and its health hazards among the medical students

Author(s): Pandve HT, Raut A
Year: 2011
Journal: Indian Journal of Occupational and Environmental Medicine. 15 (1): 42-45

Abstract:

BACKGROUND: Climate change has emerged as one of the most devastating environmental threat and there is overwhelming evidence of wide range of implications for human health. To mitigate this, well-prepared medical man power is required. OBJECTIVES: The objectives of this study were (1) to assess the awareness regarding climate change and its health hazards among the medical students and (2) to recommend the awareness campaigns regarding climate change and its health hazards for students based on the results. SETTINGS and DESIGN: This observational study was conducted at the Medical College in Pune city. MATERIALS and METHODS: Medical students from all years of M.B.B.S. (Bachelor of Medicine and Bachelor of Surgery) who had given the written consent were included in this study. A self-administered, pre-tested, questionnaire was used. Responses were evaluated. STATISTICAL ANALYSIS USED: Proportions, percentage, and Chi-square test. RESULTS: A total of 250 medical students were included in this study. In all, 246 (98.40%) students commented that global climate is changing, while 245 (98%) students opined that human activities are contributing to climate change. The commonest source of information about climate change was newspaper and magazines (78.20%). Majority commented that deforestation and industrial and vehicular pollution contribute most to climate change. According to 47.50% of the students, health-related issues are priority for climate change prevention strategy. According to 65.10% students, direct physical hazards of extreme climatic events are most important health-related impact of climate change, followed by natural disaster-related health hazards (43.50%), waterborne diseases (27.60%), vector-borne diseases (17.60%), and malnutrition (10%). There was statistically significant difference found between year of MBBS of the students and the awareness regarding United Nations Federation on Climate Change, Kyoto protocol (chi(2) Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 7.85, P Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 0.02), and Intergovernmental Panel on Climate Change (chi(2) Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 12.77, P Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 0.002). A significant difference was found between the awareness about health impact of climate change at different places (chi(2) Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 11.25, P Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 0.001). CONCLUSION: Students had awareness regarding health hazards of the climate change, but improvement for mitigation is required. It is suggested that a large nation-wide awareness survey regarding climate change and its health hazards is necessary to determine the preparedness of medical students and also to suggest any changes in the current curriculum.

Source: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3143517

Resource Description

Communication: ☑

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

Other Communication Audience: Medical students

Exposure : ☑

weather or climate related pathway by which climate change affects health

Ecosystem Changes, Extreme Weather Event, Food/Water Security, Temperature

Extreme Weather Event: Drought, Flooding

Food/Water Security: Agricultural Productivity, Fisheries, Nutritional Quality

Temperature: Extreme Heat

Geographic Feature: ☑

resource focuses on specific type of geography

None or Unspecified

Geographic Location: ☑

resource focuses on specific location

Non-United States

Non-United States: Asia

Asian Region/Country: India

Health Impact: ☑

specification of health effect or disease related to climate change exposure

Infectious Disease, Morbidity/Mortality

Infectious Disease: Foodborne/Waterborne Disease, General Infectious Disease, Vectorborne Disease

Foodborne/Waterborne Disease: General Foodborne/Waterborne Disease, Other Diarrheal Disease

Vectorborne Disease: General Vectorborne, Mosquito-borne Disease

Mosquito-borne Disease: Malaria

Medical Community Engagement: ☑

resource focus on how the medical community discusses or acts to address health impacts of climate

change

A focus of content

Resource Type:

format or standard characteristic of resource

Research Article

Timescale:

time period studied

Time Scale Unspecified